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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,828	03/12/2004	Bradley M. Hiben	CM06186H	8521
22917	7590	05/30/2006	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			MATTIS, JASON E	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/799,828

Applicant(s)

HIBEN ET AL.

Examiner

Jason E. Mattis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-24 is/are pending in the application.
- 4a) Of the above claim(s) 3, 4, 6, 10, 11, 16, 17 and 20 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 2, 5, 7, 9, 12-15 and 22-24 is/are allowed.
- 6) ☒ Claim(s) 18-19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. This Office Action is in response to the Request for Continued Examination filed 3/3/06. Due to the drawing amendment, the previous drawing objection has been withdrawn. Due to the claim amendments, the previous rejection of claim 12 under 35 U.S.C., second paragraph, has been withdrawn. Claims 3-4, 6, 10-11, 16-17, and 20 are withdrawn from consideration. Claim 8 has been cancelled. New claims 21-24 have been added.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (U.S. Pat. 5842045) in view of Bridgelall (U.S. Publication 2002/0085516 A1).

With respect to claim 18, Nakamura discloses a method of receiving a synchronization field that comprises a synchronization pattern (See column 3 lines 20-31 of Nakamura for reference to receiving a synchronizing pattern of an input

signal). Nakamura also discloses comparing the received synchronization pattern against first and second known synchronization patterns **(See column 3 lines 20-31 of Nakamura for reference to comparing a received synchronization pattern to three different stored synchronization patterns)**. Nakamura further discloses selecting a protocol type to communicate with based on which known synchronization pattern the received synchronization pattern is of **(See column 3 line 51 to column 4 line 5 of Nakamura for reference to comparing the received pattern with the three stored patterns and selecting a protocol to communicate with based on which known pattern the received pattern corresponds to)**. Nakamura does not specifically disclose that method operates in a wireless communication system with the protocols corresponding to a first and second air interface type and frequency. Nakamura also does not specifically disclose that the first and second air interface types are FDMA and TDMA respectively.

With respect to claims 18, Bridgelall, in the field of communications, discloses a wireless communication system having devices that operate in accordance with both TDMA and FDMA, which are air interface protocol types with corresponding communication frequencies **(See page 1 paragraph 8 of Bridgelall for reference to dual mode Radios that operate according to both FDMA and TDMA)**. Using a wireless communication system having devices that operate in accordance with both TDMA and FDMA has the advantage of allowing communications to take place between devices using multiple air interface protocols without requiring the devices to be hardwired to each other.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Bridgelall, to combine using a wireless communication system having devices that operate in accordance with both TDMA and FDMA, as suggested by Bridgelall, with the method of protocol determination method of Nakamura, with the motivation being to allow communications to take place between devices using multiple air interface protocols without requiring the devices to be hardwired to each other.

With respect to claim 19, Nakamura discloses that the first and second synchronization patterns are uncorrelated (**See column 3 line 51 to column 4 line 5 of Nakamura for reference to comparing the received pattern with the three stored patterns, which must inherently be different, and therefore uncorrelated, such that a decision as to which of the three stored patterns matches the received pattern is made**).

4. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of Bridgelall as applied to claims 18-20 above, and further in view of Pucheu-Marque (U.S. Pub. US 2002/0089948 A1).

With respect to claim 21, the combination of Nakamura and Bridgelall does not disclose using a synchronization pattern defined in ANSI.102.BAAA.

With respect to claim 21, Pucheu-Marque, in the field of communications, discloses communicating using a frame structure as defined by TIA/EIA-102.BAAA (**See page 4 paragraph 43 of Pucheu-Marque for reference to using a frame structure**,

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which includes a synchronization pattern as defined by TIA/EIA-102.BAAA).

Using a synchronization pattern defined in ANSI.102.BAAA has the advantage of using a pattern that adheres to a known industry wireless communication standard.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Pucheu-Marque, to combine using a synchronization pattern defined in ANSI.102.BAAA, as suggested by Pucheu-Marque, with the method of the combination of Nakamura and Bridgelall, with the motivation being to use a pattern that adheres to a known industry wireless communication standard.

Allowable Subject Matter

5. Claims 1-2, 5, 7, 9, 12-15, and 22-24 are allowed.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason E. Mattis whose telephone number is (571) 272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jem



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